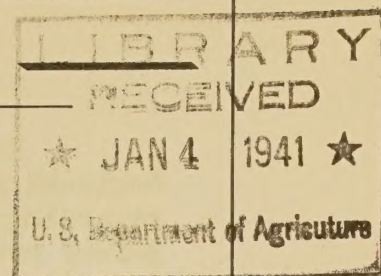


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# news letter

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No. 6.

## GENERAL ADMINISTRATION

Dr. Knight participated in a broadcast on "Agriculture in Defense" on November 18 during the Department's National Farm and Home Hour in cooperation with the National Defense Advisory Commission. Dr. Knight stated that "in case the United States is deprived by the war of the natural camphor needed by industry and by the medical profession, the present production of synthetic camphor from turpentine could be increased. As the United States produces an abundance of turpentine from pine trees, there is no lack of raw material to expand the production of the synthetic product which may be used for celluloid and other plastics, quick-drying lacquers, and for medicinal uses. The chemists of the Department have also shown that in making soap the use of rosin from pine trees could be increased. Soap making to a considerable extent depends on oils which have heretofore been imported, the principal oil used being coconut oil. Research has shown that rosin can replace a portion of the coconut oil. We could also get along without imported starch by utilizing the starch of the sweetpotato. Chemists of the Bureau have been able to show that  $11\frac{1}{2}$  pounds of starch can be produced from a bushel of sweetpotatoes. There are now two plants in the South making sweetpotato starch, one at Laurel, Miss., and the other at St. Francisville, La. Seventy-five plants of the capacity of the Laurel plant and 175 thousand acres of sweetpotatoes to keep the plants operating would provide the United States with all of the starch we need to replace our importations. The plants could be in operation within six months."

As an example of what had been done in similar circumstances, Dr. Knight cited the establishment of the American dye industry which during the World War made the United States independent of foreign dyes.

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Henry A. Donovan conferred with officials of the Northern Regional Research Laboratory at Peoria, Ill., on November 26 and 27, regarding administrative and business activities of the Laboratory. Before returning to Washington, he discussed with the Manager of the Seventh U. S. Civil Service District at Chicago matters regarding personnel and employment.

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The annual solicitation of funds by the Community Chest in the 1941 Campaign, November 12-26, met with success in the Bureau. The final report showed the Bureau's contributions to be \$2,391.86 or 101.65 percent of the quota assigned to the Bureau of \$2,353. The support which nearly every employee of the Bureau gave to the Chest this year was very gratifying. Dr. Knight acted as Departmental Vice-Chairman in the Campaign this year and Assistant Secretary Grover B. Hill was Departmental Chairman.

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Miss F. E. Loyd of the Business Administration Division is transferring to the Western Regional Research Laboratory, Albany, California, and will report for duty on January 2, 1941.

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Philip Rossel, time clerk for the Bureau, has transferred to the Wage and Hour Division of the Department of Labor, New York City. Martin Glabberman has been appointed time clerk.

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Mrs. Evelyn H. Young of the Auditing Section was admitted to practice before the Supreme Court of the United States on November 18. Mrs. Young received the degrees of B.A. and M.A. from George Washington University and LL.B from the Washington College of Law. She passed the D. C. bar examination in 1937.

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Dr. David J. Price spent November 29 and 30 at Peoria, Ill., for the purpose of conferring with Dr. May and members of the staff of the Northern Regional Research Laboratory concerning laboratory construction and equipment matters.

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Dr. Price attended meetings of the Dust Explosion Hazards and Farm Fire Protection Committees of the National Fire Protection Association at Chicago. At the meeting of the Dust Explosion Hazards Committee consideration was given to safety codes for the prevention of dust ignitions in country grain elevators and for dust removal by suction in terminal grain elevators.

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The relation of rural fire departments in the defense program was considered at the meeting of the Farm Fire Protection Committee. On Wednesday, December 4, Dr. Price attended conferences relating to the formulation of a model law for use in connection with the rapid development of rural electrification. He also attended the meeting of the Agricultural Committee of the National Fire Waste Council of the Chamber of Commerce of the United States.

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At the request of the National Defense Advisory Commission Dr. Price was named by the Secretary of Agriculture to represent the Department on the newly organized committee on Fire Prevention, Protection, and Communications. That committee will be responsible for the formulation of plans for the protection of American cities and communities from fires following air raids and bombing operations. The committee includes representatives from the United States Conference of Mayors, the International Associations of Fire Chiefs and Fire Fighters and other fire service organizations, as well as representatives from the War, Navy, and Agriculture Departments. The chairman of the committee is Mayor Maurice E. Tobin of Boston. The committee has held its organization meeting and is preparing a report for presentation to the Commission at an early date.

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Byron J. Culp spent the period from November 19 to 25 on a safety inspection trip to the Bureau's Cotton Ginning Laboratory at Stoneville, Miss.

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R. L. Hanson went to Chicago on December 10 for the purpose of attending the 1940 National Chemical Exposition. He expected also to spend some time in Peoria conferring with the staff of Northern Regional Research Laboratory concerning the installation of laboratory and experimental equipment.

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#### PROTEIN AND NUTRITION RESEARCH

Dr. Claude H. Hills reported for duty on November 26 to fill a vacancy in this Division in connection with the basic research project on plant virus set up under the Bankhead-Jones Act. Dr. Hills took his A.M. degree at the University of Missouri, where he carried on research on tobacco mosaic virus. Later, he entered the graduate department of the University of Minnesota, where he received his Ph.D., majoring in biochemistry.

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The following recently visited the Division for conference and consultation on matters pertaining to proteins and nutrition:

Dr. L. H. Almy, H. J. Heinz Company, Pittsburgh, Pa.

Dr. W. H. Stroud, Soft Wheat Millers' Association,  
Nashville, Tenn.

Dr. C. H. Bailey, College of Agriculture, University  
of Minnesota.

C. O. Ewing, United Drug Company, Boston, Mass., and  
Dr. L. M. Tolman, Wilson and Company, Chicago, Ill.,



## NAVAL STORES RESEARCH

C. F. Speh, accompanied by Dr. W. W. Skinner, left Washington November 10 for an extended trip in the South, traveling through North Carolina, Georgia, Florida, and Louisiana. The trip included consultations with the State Forester of North Carolina and with various naval stores producers of the South regarding naval stores problems, as well as stop-overs at the Naval Stores Station at Olustee and the Citrus Products Laboratory at Winter Haven. Mr. Speh also conferred with Professors Leigh, Beisler, and Black of the University of Florida regarding proposed cooperative work.

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Dr. Nandor Porges recently transferred to the staff of the Southern Laboratory from the Byproducts Laboratory at Ames, Iowa. He has been detailed to Washington for the next few months to assist in research work on mildewproofing of sandbags in connection with the National Defense work.

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## ALLERGEN INVESTIGATIONS

Dr. Joseph R. Spies attended the meeting of the Society for the Study of Asthma in New York City, November 30, 1940.

While in the city he visited the laboratories of the New York Medical Center and Roosevelt Hospital and conferred with biochemists of those institutions.

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## FIBER FLAX INVESTIGATIONS

Recent visitors at the Corvallis Fiber Flax Machinery Shop were: Dr. Blish; Dr. Howard and Dr. Brother of the Western Regional Laboratory, and W. M. Hamilton of the New Zealand Department of Scientific and Industrial Research, Wellington, New Zealand.

Mr. Hamilton's visit resulted in a request from his government, through their Canadian Trade Commission, for permission to manufacture and use a fiber flax deseeder developed at Corvallis.

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## FARM MECHANICAL EQUIPMENT RESEARCH

R.B. Gray returned to Washington via Toledo December 8 from the American Society of Agricultural Engineers meeting at Chicago, where he gave a paper dealing with agricultural crop residues with special reference to straw and cornstalks and discussed with representatives of industry and educational institutions problems of mutual interest relating to farm machinery. One of these latter prob-



lems involved suggestions for revising and enlarging the popular Bulletin - Miscellaneous Publication No. 157 "Power and Machinery in Agriculture." At Toledo Mr. Gray discussed plans for future work on the insect pest control machinery project with Frank Irons.

W. R. Humphries, Division of Farm Mechanical Equipment, and H. E. Besley of the New Jersey Agricultural Experiment Station, prepared a paper on "Machinery for Harvesting and Handling Grass Silage," for presentation December 4, 1940, at the Chicago meeting of the American Society of Agricultural Engineers.

Frank Irons spent December 10 at Washington mainly with Bureau of Entomology and Plant Quarantine representatives on the subject of dust insecticides and ways and means of analyzing samples. From Washington Mr. Irons went to New Haven, Conn., to attend a corn borer insecticide conference between Federal and State officials.

Mr. Irons also attended the American Society of Agricultural Engineers meeting at Chicago, as did also Claude K. Shedd from Ames, the latter giving a paper entitled "Equipment for Corn Cultivation."

A paper prepared by I. F. Reed entitled "The Effect of Shape on the Draft of 14-inch Moldboard Plow Bottoms," was presented at the above meeting.

S. W. McBirney reports that several growers have built special sugar beet loaders for use with hand topping. The most promising of those inspected consists of a conveyor across the rear of a small tractor, onto which 12 rows of beets are hand topped by six men. An elevator at each side loads the beets directly into a truck. An additional transmission in the tractor brought its speed down to that of hand topping. Trucking costs are higher as an additional truck is necessary, but savings in man labor and harvest cost can be made. On other loaders of this type where beets are elevated to a bin on the loader, so much time is often lost in transferring beets to trucks that little if any savings result.

G.A. Cumings attended several committee meetings and sessions of the American Society of Agronomy in Chicago during the period December 2 to 6 and conferred with a number of experiment station representatives concerning plans for cooperative fertilizer-placement studies. On December 2 Mr. Cumings presided at the annual meeting of the National Joint Committee on Fertilizer Application. On December 3 a colored motion picture prepared by the National Fertilizer Association under the title "Putting Plant Food to Work" was previewed by a large group of scientists. A number of the scenes in the picture were taken from fertilizer placement experiments in which our Bureau participated.



Mr. Cumings was again elected general chairman of the National Joint Committee on Fertilizer Application which consists of representatives from the American Society of Agronomy, the American Society of Agricultural Engineers, the American Society for Horticultural Science, the Farm Equipment Institute and the National Fertilizer Association.

Walter H. Redit was called to active military duty at Washington, D. C., on December 16, for one year as First Lieutenant and assigned to personnel work in connection with flying cadets.

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#### RURAL ELECTRIFICATION RESEARCH

Reports on the cooling of eggs on farms by J. W. Weaver, at the Virginia Agricultural Experiment Station, indicates that the farmers of the humid Eastern States have several practical methods available to them at small cost, all of which will help to preserve the freshness of eggs until they reach the market. The most satisfactory results were obtained by circulating cooling water from a milk cooling tank through coils in a separate box and maintaining a relative humidity of around 90 per cent.

Mr. Garver has recently visited each of the cooperating institutions in the Middle West. While in Chicago he attended the Technical Sections' meetings of the American Society of Agricultural Engineers and read a paper on stock tank water warmers prepared by F.D. Yung at the Nebraska Experiment Station. Mr. Garver also attended one session of the National Fire Protective Association's meeting and another day with a subcommittee on a model code for electrical inspection. A model State law, requiring State inspection of all electrical installations outside municipalities already having such codes, was adopted.

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#### EASTERN REGIONAL RESEARCH LABORATORY

R. K. Eskew, Chief of the Chemical Engineering and Development Division, attended the meeting of the American Institute of Chemical Engineers that was held at New Orleans, December 3 and 4.

R. E. Lothrop, Technical Assistant to the Director, gave a talk entitled "Industrial Utilization of Farm Products," at Lancaster, Pa., on December 12, before the Student Affiliate of the American Chemical Society of Franklin and Marshall College.



Dr. H. H. Mottern of the Biochemical Division, and P. W. Edwards of the Chemical Engineering and Development Division, spent approximately two weeks at Sterling, Mass., the latter part of November, carrying on pilot-plant scale experimental work on apple juice concentration. The principal emphasis of this work was placed on retention of volatile flavoring constituents.

Experimental work on apple juice got under way in the Biochemical Division the early part of December. The equipment used was suitable for semi-commercial plant scale operations. A number of batches of apple juice already have been canned.

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#### SOUTHERN REGIONAL RESEARCH LABORATORY

R. J. Cheatham presented an address entitled "The Industrial Utilization of Cotton" on November 23, 1940, before the Oklahoma Farm Chemurgic Conference at Tulsa, Okla.

W. H. Goss of the U. S. Regional Soybean Laboratory at Urbana, Ill., was a visitor at this Laboratory from November 28 to December 5.

H. T. Herrick, Assistant Chief of Bureau conferred with the Director and staff from November 30 to December 4 concerning the work of the Laboratory.

Marvin Geiger of the Mississippi Agricultural Experiment Station at Starkville, Miss., conferred with Dr. K. S. Markley on the utilization of cotton-seed protein.

James A. Lee of Chemical and Metallurgical Engineering was also a recent visitor at this laboratory.

Dr. Lucien H. Greathouse of Washington, D. C. has been appointed to the position of Associate Chemist in the Sweetpotato Products Division effective December 8. This appointment is by reinstatement.

The American Institute of Chemical Engineers held their annual meeting in New Orleans from December 1 to 5, inclusive. E.A. Gastrock, H.J. Molaison, and Dr. J. T. Stearn of the Southern Regional Research Laboratory served on the local committee on arrangements.

Among the visitors to the Southern Regional Research Laboratory during the A.I. Ch. E. meeting, and who were taken for a tour of the building site, were the following:



F. O. Rice, Department of Chemistry, Catholic University; Dr. Emil Ott, Director of Research, Hercules Powder Company; W. A. Cunningham, University of Texas; Dr. L. W. Bass, Mellon Institute; Dr. R. M. Boarts, University of Tennessee; Dr. M. C. Molstad, University of Pennsylvania; Dr. R. L. Copson, Tennessee Valley Authority; Dr. A. K. Smith, Soybean Laboratory; Dr. R. K. Eskey, Eastern Regional Research Laboratory; C. A. Thomas, Director of Research, Monsanto Chemical Company.

Dr. E. P. Schoch, Department of Chemical Engineering of the University of Texas visited the downtown offices of the Laboratory while attending the A.I. Ch. E. meeting.

Dr. J. G. Lee, Jr., Dean of Agriculture, Professor Hazel Baker, of the Department of Home Economics, and Dr. Clara Tucker, head of the Home Economics Department of Louisiana State University conferred with staff members regarding the proposed textiles work of this laboratory, and were taken for an inspection tour of the new laboratory building.

Through the courtesy of S. N. Collier, District Supervisor, and Leslie J. Hoyt, Chemist in Charge, of the Alcohol Tax Unit of the Internal Revenue Service, New Orleans, La., facilities have been furnished the Oil, Fat and Protein Division to undertake work on some of the most pressing problems of the division. The installation of a new center bench has just been completed, and most of the essential apparatus and glassware has been installed.

On December 13, members of the National Association of Commissioners, Secretaries and Directors of Agriculture, who were in session at their annual convention in New Orleans, visited the laboratory building.

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#### WESTERN REGIONAL RESEARCH LABORATORY

Bryon J. Culp, Assistant Safety Engineer, arrived in Albany on December 10 for an inspection of safety and fire prevention conditions at this laboratory.

W. B. Van Arsdel, Chief of the Engineering and Development Division, is scheduled to present an address entitled "The Western Regional Laboratory for Research on the Utilization of Farm products" before a meeting of the California Agricultural Economic Conference which will be held at Stockton, Calif., on December 17 and 18.

Among the visitors to the laboratory during the month of November were the following: G.H. Briggs, Director, Bureau of Standards, Sidney, Australia; Prof. R. T. Birge, Chairman of the Physics Department, University of California, and Professors Brode and White of the same Department; W.E.O'Neil, President of the W.E.O'Neil Construction Company of Chicago. This company has constructed the Northern Regional



Laboratory at Peoria; Dean C. Ingraham, Chemist in charge of the Durkee Company's Berkeley factory; Bro. Francis J. Reinkey, S.J., Winemaker at the Noviate of Los Gatos, Los Gatos, Calif.

H. C. Diehl and Dr. R. P. Straka are planning to attend a meeting of the Northwest Frozen Foods Association in Seattle on December 12 and 13.

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#### NORTHERN REGIONAL RESEARCH LABORATORY

Sylvester T. Schicktanz has been transferred from the Oil, Fat, and Protein Division of the Southern Laboratory to the Northern Laboratory, as Chief of the Agricultural Motor Fuels Division. Mr. Schicktanz was graduated from the University of Illinois in 1928 with a Bachelor of Science degree in chemical engineering. He also attended Johns Hopkins University. He was Research Associate at the National Bureau of Standards from 1928 to 1936. For the period 1936 to 1940 he was with the Alcohol Tax Unit of the Bureau of Internal Revenue.

Dr. G. E. Hilbert, Chief, Starch and Dextrose Division, accompanied by Dr. C. L. Mehltretter and Carl E. Rist, visited the Clinton Company at Clinton, Iowa, and Penick and Ford Inc., at Cedar Rapids, Iowa.

Dr. G. E. Hilbert, Chief, Dr. Sulo A. Karjala, and Dr. R. L. Whistler, of the Starch and Dextrose Division, visited Chicago to confer with representatives of the Corn Products Refining Company and the American Maize Products Company.

J. J. Curtis, Assistant Agricultural Technologist in the Commodity Development Division, attended the recent corn improvement conference at Chicago.

Dr. George E. Ward, Senior Chemist, Dr. Kenneth B. Raper, Microbiologist and Dr. Lewis B. Lockwood, Assistant Microbiologist, previously transferred from the Bureau of Agricultural Chemistry and Engineering to the Northern Laboratory, have recently taken up active duties in the Fermentation Division of the Northern Laboratory at Peoria.

Dr. E. C. Lathrop, Chief, Agricultural Residues Division attended the fall meeting of the American Society of Agricultural Engineers in Chicago. Of special interest was the symposium, "Equipment Methods and Costs of Collecting Farm Crop Residues." In the resulting discussion Doctor Lathrop took a prominent part.



Dr. E. H. Melvin and Dr. J. C. Cowan visited the Soybean Laboratory at Urbana, Illinois.

Dr. M. M. MacMasters of the Starch and Dextrose Division interviewed officials of the Rayno Research, and Doctor Otto Sjostrom, retiring research chemist of Corn Products Refining Company in Chicago.

Dr. W. W. Skinner, Associate Chief, and H. T. Herrick, Assistant Chief of the Bureau, conferred with members of the staff of the Northern Laboratory.

Dr. T. R. Naffziger was in Chicago December 11-12 conferring with representatives and manufacturers of laboratory equipment and apparatus.

Arnold P. Yerkes, Editor of Tractor Farming, International Harvester Company, recently called at the Laboratory to discuss with Dr. E. C. Lathrop and J. H. Shollenberger problems and equipment in connection with the collection of agricultural residues.

Henry A. Donovan, Assistant to the Chief, and Dr. David J. Price were in Peoria for conferences with members of the Laboratory staff.

Joseph A. Scott, Chief of the Division of Plans and Service, has been in Peoria in connection with the inspection and acceptance tests at the Laboratory.

B. J. Culp, safety engineer of the Bureau, was in Peoria in connection with the making of a safety survey of the Laboratory.

The administrative wing, the chemical laboratory wing, and the Service Building of the Northern Laboratory were occupied for the first time December 16, 1940.

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Agricultural By-Products Laboratory, Ames, Iowa.

Dr. S. I. Aronovsky and T. F. Clark spent November 18-20, at Peoria, conferring with Drs. O.E. May and E. C. Lathrop and other members of the staff of the Northern Laboratory.

Roy F. Hendrickson, Director of the Office of Personnel of the U. S. Department of Agriculture, Washington, D.C., visited this laboratory on December 3.

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U. S. REGIONAL SOYBEAN INDUSTRIAL PRODUCTS  
LABORATORY, URBANA, ILLINOIS

Following the Tri-Sectional meeting of the American Association of Cereal Chemists, which was held in Urbana on November 9, a group of thirty chemists who attended the meeting was shown through the Soybean Laboratory by Dr. R. T. Milner, Director.

W. H. Goss, Chemical Engineer, and V. F. Pfeifer, Junior Chemical Engineer, were in Louisville, Ky. on November 27 where they inspected the Buckeye Cotton Oil Company's new solvent extraction plant for processing soybeans. From Louisville, Mr. Goss went to New Orleans where he conferred with the officials of the Southern Laboratory regarding their research program on processing of fats, oils, and oilseeds, and attended the meetings of the American Institute of Chemical Engineers on December 2-5.

To confer with officials of various paper companies regarding the use of soybean protein in paper coatings, Dr. A. K. Smith spent November 25 and 26 in Kalamazoo, Michigan. The companies visited by Doctor Smith were the Allied Paper Mills, Kalamazoo Paper Company, and Bryant Paper Company. On his return trip to Urbana, Doctor Smith visited the American Coating Mills at Elkhart, Ind.

H. A. Lepper of the Food and Drug Administration visited the Soybean Laboratory in November.

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FARM STRUCTURES RESEARCH

R. Tynes Smith, Jr., has left his headquarters at Baltimore for Davis, Calif., to assist in tests of oil burning orchard heaters, under the cooperative project with the University of California. The field tests will be made at Riverside, Calif. and will include a number of heater types and modifications developed by the Bureau.

A. D. Edgar who is stationed at Scottsbluff attended the meeting of the Iowa Vegetable Growers Association at Clear Lake, Iowa, December 11 and 12. He presented two papers, one by himself and G.A. Cumings on potato handling methods and fertilizer placement and another on potato storage.

J. R. McCalmont presented a joint paper with H. E. Besley of the New Jersey Agricultural Experiment Station, entitled "Results of Studies of Grass Silage Storage Problems," at the meeting of the Association of Silo Manufacturers at Chicago, Ill., on December 2. The same paper was presented by Mr. Besley at the American Society of Agricultural Engineers meeting on December 4. The lively interest being



taken in the subject of grass silage is indicated by the fact that in addition to the above the subject was also included in programs of the Farm Equipment Institute held a few days after the A.S.A.E. meeting and at a meeting of Committee 714, of the American Concrete Institute.

Otto E. Brunkow, H. J. Barre and Wallace Ashby also attended the meeting of the Structures Division, American Society of Agricultural Engineers. Mr. Brunkow was joint author of a paper on "Remodeling of Farm Buildings." This paper was illustrated with colored slides showing the remodeled farmhouses.

Following the regular session of the Structures Division, A.S.A.E., a special meeting was held on the morning of December 5, to consider the need for more farm building specialists. As a result a special committee was appointed to consider this subject and the need for an expanded program of farm structures research and extension. Professor E. W. Lehmann of the Department of Agricultural Engineering, University of Illinois, is chairman of this committee and Professor Ray W. Carpenter, University of Maryland, is vice-chairman.

Dr. Barre, and Mr. Ashby conferred with Professor Lehmann and Thayer Cleaver regarding the conduct of the storage studies being carried on in cooperation with the University of Illinois.

Following the A.S.A.E. meeting, Mr. Ashby and S. P. Lyle of the Extension Service visited the farmhouse modernization project at Madison, Wis., and saw 3 farmhouses that had been recently modernized. Conferences were held with Associate Director Clark of the Wisconsin Experiment Station, Associate Director Clark of the Extension Service, and members of the staff of the Department of Agricultural Engineering.

Four standpipes have been set up at the North Dakota Agricultural College Experiment Station to determine the amount of snow blown into various types of ventilating heads and also to test these heads for the pressure or suction created by the wind. The following types of cowls will be studied: Plain pressure, turbine suction, commercial suction, a special cowl designed by W. R. Swanson, two plain pressure cowls with traps, and one designed to close by snow trapped within it.

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PUBLICATIONS APPEARING OUTSIDE THE DEPARTMENT

- BENNETT, C. A. (With F. L. GERDES, Agr. Marketing Service) The operation and care of gin saw sharpening machinery. Cotton Ginners' Jour. 12(2): 5, 6, Nov. 1940.
- BICKFORD, W. G. and MARKLEY, K. S. The stability of vegetable oils. II. Apparatus for determination of the rate of fading of methylene blue-fat system. Oil and Soap 17(11): 232-240, Nov. 1940.
- BOWEN, J. T. and HUKILL, W. V. Refrigeration has many uses in the laboratory. Refrigerating Engin. 40(5): 287-291, 305, Nov., 1940.
- BOYNTON, JOHN O., Avoid cracked still crowns. Weekly Naval Stores Rev. 50:35, p. 15, Nov. 30, 1940.
- \_\_\_\_\_, Protect your still plant from fire. Weekly Naval Stores Rev. 50:36, p. 13, Dec. 7, 1940.
- CAMPBELL, H. and DIEHL, H. C. Quality in frozen pack peas. West. Canner and Packer 32(10&11): 48-50, 51-53, Sept. and Oct., 1940
- COULSON, E. J. and STEVENS, H. Antigenic relationship of cotton linters, dust, and dust precursors. Jour. of Allergy 11(6): 537-556, Sept. 1940.
- CROPSEY, M.G. 9,000,000 bushels of potatoes. The Bison Furrows. 4(2): 5,15, Nov. 15, 1940.
- DETWIIR, S.B., JR. Supplement to bibliography on molecular or short-path distillation. Oil and Soap 17(11): 241-243, Nov. 1940.
- FREY, R. W. (With A.F. SIEVERS, Bureau of Plant Industry) A program on the development of domestic tanning materials. Jour. Amer. Leather Chem. Assoc., 35(11): 647-655, Nov. 1940.
- KNIGHT, H. G. The new farm research laboratories of the U. S. department of agriculture. Register of Phi Lambda Upsilon 25(4): 104-108, Nov. 1940.
- MOTTERN, H.H., NEUBERT, A.M. and EDDY, C.W. Canning apple juice in the pacific northwest. Fruit Prods. Jour. and Amer. Vinegar Indus. 20(2): 36-38, 55 & 57, Oct. 1940.
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- POHLE, W. D. and SPEH, C. F. Detergent action of rosin soaps and fatty acid-rosin soaps. Oil and Soap 17(10): 214-216, Oct. 1940.
- SPEH, C. F. 1940 Semi-Annual Naval Stores Report. (ACE 70).
- STEARN, J. T., MAKOWER, B. and GROGGINS, O.H. Lactic acid as a component of synthetic resins. Indus. & Engin. Chem. 32(10):1335-1342, Oct. 1940.
- WILLAMAN, J.J. New outlets from research. Rept. of 6th Ann. Meeting of Natl. Apple Institute, Rochester, N.Y. pp.36-39, April 17-18, 1940.



# CHANGES IN PERSONNEL

(Recent Appointments - Indefinite or Probationary)

Mary Nell Graham	Under Scien. Helper (Los Angeles, Calif.)	Agr. Chem. Res. Div.				
Howell Morgan, Jr.	Sr. Engr. Draftsman	Plans & Service Div.				
George H. Tsurucka	Engineering Draftsman (Architectural)	" " " "				
Claude H. Hills	Associate Chemist	Protein & Nutrition				
Henry Rothenbach	Jr. Clerk-Typist (Wyndmoor, Pa.)	East. Reg. Res. Lab.				
Robert F. Lockard	Senior Carpenter	" " " "				
William M. Heinly	Senior Guard (Mechanic)	" " " "				
Earl W. Fries	" " " "	" " " "				
Daniel G. McDuffie	Sr. Operating Engineer	" " " "				
Mrs. Lucille T. Caldwell	Jr. Stenog.	" " " "				
Richard F. Boyle, Jr.	Unskilled Laborer	" " " "				
George W. Brown, Jr.	" " " "	" " " "				
William R. Benner	" " " "	" " " "				
Micahel Butler	" " " "	" " " "				
Frederico Cichella	" " " "	" " " "				
William H. Cook, Jr.	" " " "	" " " "				
Robert E. Flynn	" " " "	" " " "				
Patrick Geoghan	" " " "	" " " "				
George Hamer	" " " "	" " " "				
George F. Maxwell	" " " "	" " " "				
James E. Kinsella	" " " "	" " " "				
Rudolph G. Miller	" " " "	" " " "				
Ernest E. Palm	" " " "	" " " "				
Thomas N. Powers	" " " "	" " " "				
Frank Restall, Jr.	" " " "	" " " "				
John J. Wilson	" " " "	" " " "				
William Wolf	" " " "	" " " "				
James A. Whitehead	Sr. Stationary Boiler Fireman (Peoria, Ill.)	North. " " "				
Meryl F. Swanson	Electrician's Helper	do " " "				
Harold R. Wyllys	Guard	do " " "				
Don A. Krider	Skilled Laborer	do " " "				
Harry B. Titus, Jr.	Skilled Laborer (Oiler)	do " " "				
Alfred F. Fitton	Machinists Helper	do " " "				
Carl G. Chatfield	Sr. Operating Engineer	do " " "				
Albert C. Tullar	" " " "	do " " "				
Henry R. Hileman	Senior Carpenter	do " " "				
Henry E. Dant	Principal Operating Engineer	do " " "				
James C. Code	Steamfitters & Pipefitters Helper	do " " "				
Olga P. Gatzke	Jr. Clerk-Stenog.	do " " "				
Gene F. Walentiny	Unskilled Laborer (Albany, Calif)	West. " " "				
Walter G. Urch	" (Cleaner)	" " " "				
Ralph P. Hare	Senior Electrician	" " " "				
Charles L. Schaefer	Under Mail Clerk	" " " "				
William Morgan	Guard	" " " "				
James V. Glass	"	" " " "				
Frederick W. Herms	"	" " " "				
Daniel W. Elam	Assistant Chemist	" " " "				



(Recent Appointments - Temporary)

Dorothy V. Huzzard	Junior Stenog.	Business Admin(Personnel)
Margaret S. Smith	Jr. Clerk-Stenog.	" " "
Marjory E. Mathias	Minor Scien. Helper	Agr. Chemical Res. Div.
Paul D. Little	Under Scien. Helper	" " " "

(Separations)

John L. Catlett	Jr. Sugar Technologist (Meridian, Miss.)	Agr. Chem. Res. Div.
Domenic DeFelice	Agent(F.C.)(Geneva, N.Y.)	" " " "
Luther P. Deroche	Laborer (Houma, La.)	" " " "
Mozelle Bowen	Clerk-Stenog.(Winter Haven, Fla.)	" " " "
Mrs. Virginia F. Mackey	Jr. Clerk-Typist	Bus. Adm.(Purchase and Property)
George A. Kerr-	Tenning Mat. Technologist (Trevilians, Va.)	East. Reg. Res. Lab.
Roland C. Johnson	Asst. Storekeeper (Wyndmoor, Pa.)	" " " "
Lloyd M. Joshel	Assistant Chemist (to Bureau of Animal Industry)	Naval Stores Res. Div.



